

FIG. 1 is a block diagram of a system for processing a paper bill. The system includes a Paper Bill (110), a Scanner (112), a Coupon Engine (114), a Coupon Database (116), and a Bill Type/Coupon ID/Fields of Interest (118). The Scanner (112) receives the Paper Bill (110) and outputs a Binary Image to the Coupon Engine (114). The Coupon Engine (114) is connected to the Coupon Database (116) and outputs the Bill Type/Coupon ID/Fields of Interest (118).

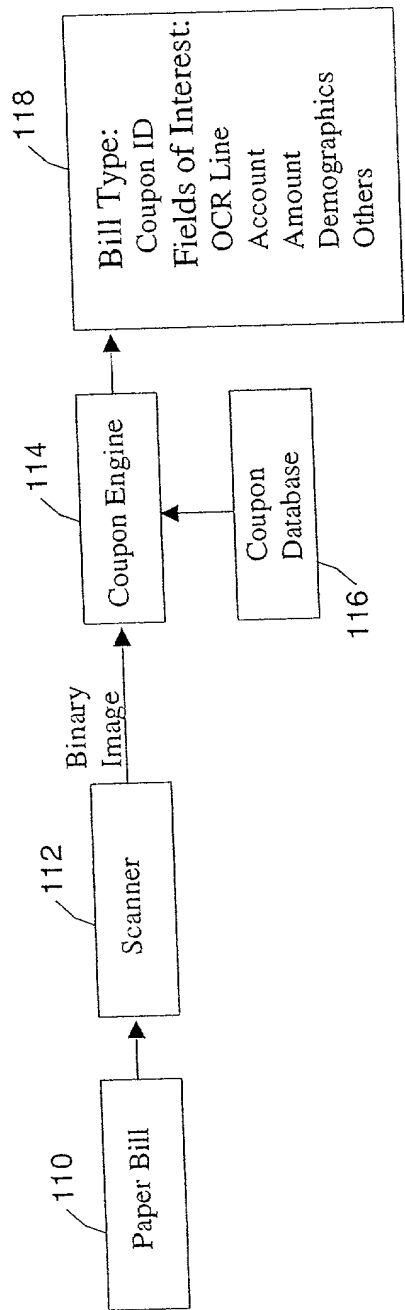


Fig. 1

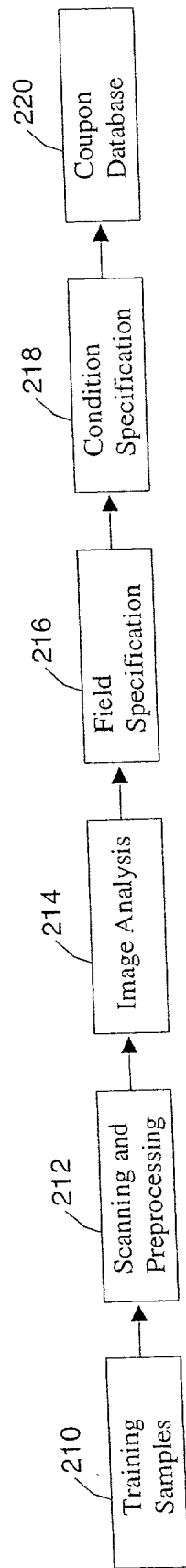


Fig. 2

FIG. 3 is a block diagram of a system for processing a binary image to extract information from a coupon. The system includes a Preprocessor (310), a Segmentator (312), a Match Coupon (314), an Extract Information (316), and a Postprocessor (318). The Preprocessor (310) receives a Binary Image and outputs to the Segmentator (312). The Segmentator (312) outputs to the Match Coupon (314). The Match Coupon (314) outputs to the Extract Information (316). The Extract Information (316) outputs to the Postprocessor (318). The Postprocessor (318) outputs Bill Type & Fields of Interest. A Database (315) provides Template information to the Match Coupon (314) and Zoning Information to the Extract Information (316).

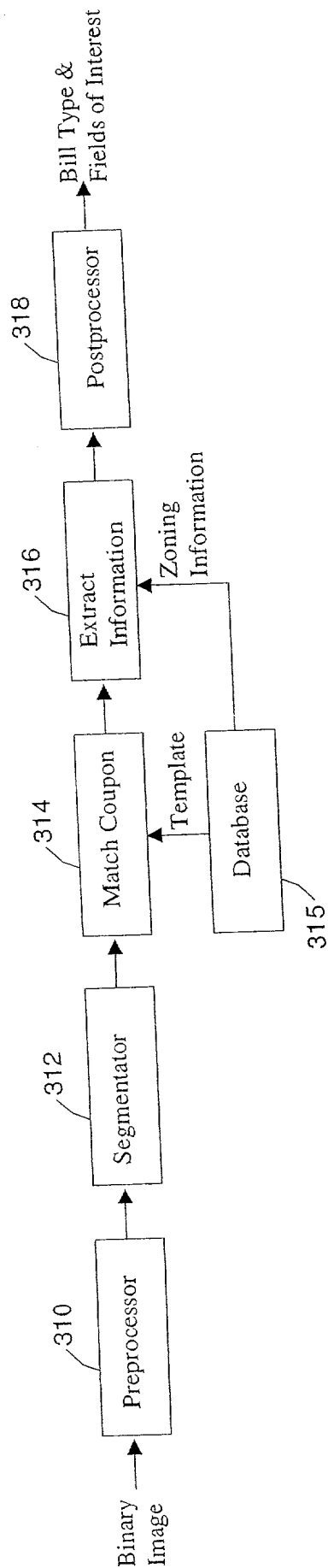


Fig. 3

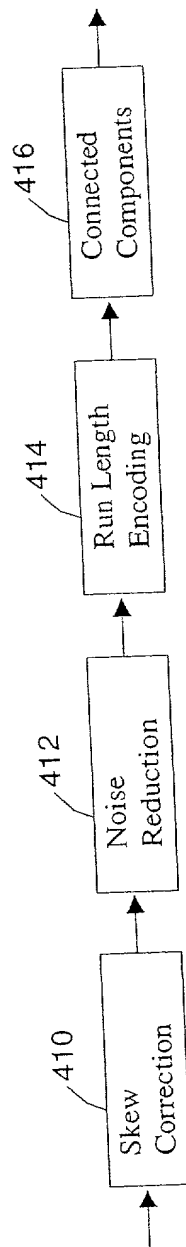


Fig. 4

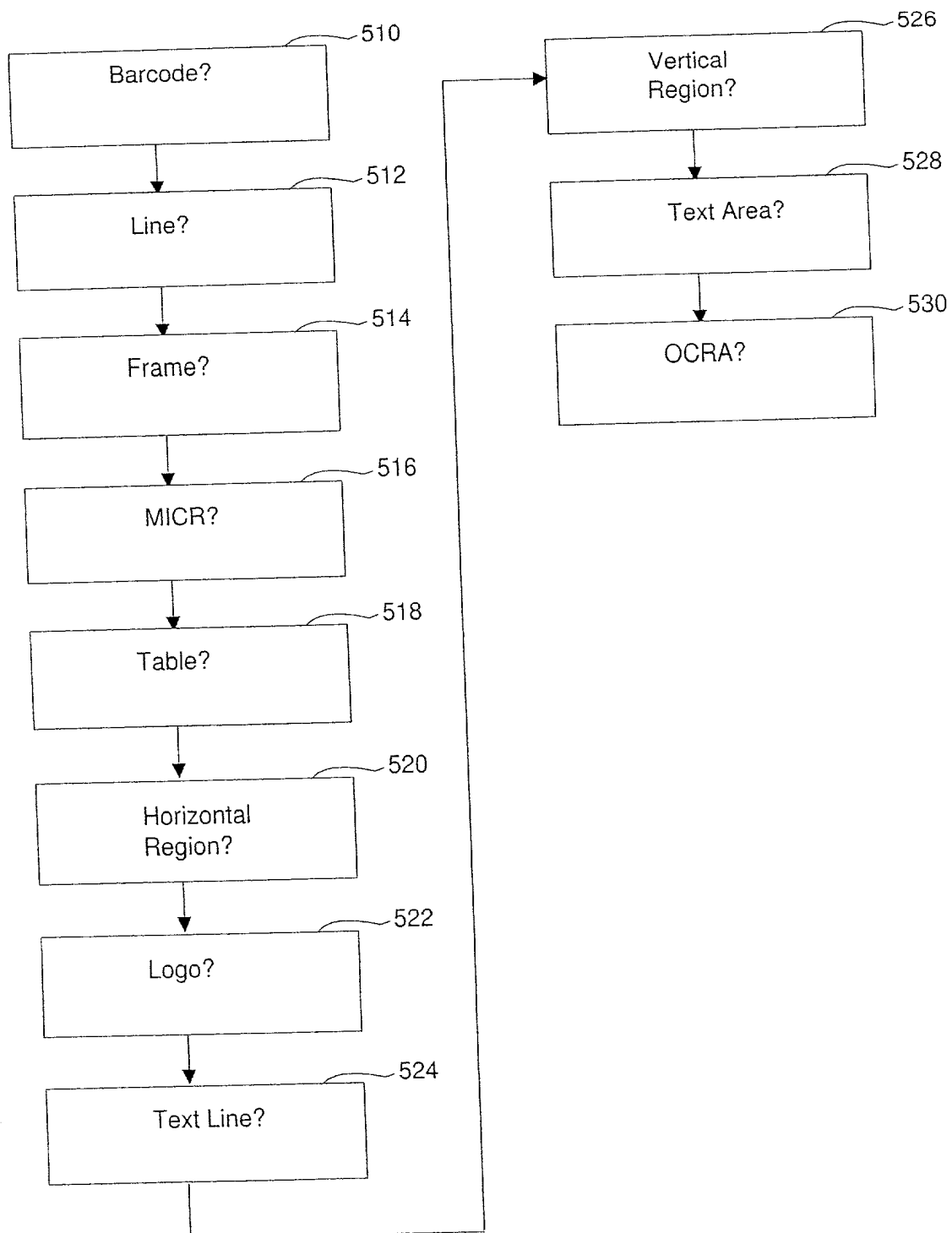


Fig. 5A

31" 32" 33" 34" 35" 36" 37" 38" 39" 40" 41" 42" 43" 44" 45" 46" 47" 48" 49" 50" 51" 52" 53" 54" 55" 56" 57" 58" 59" 60" 61" 62" 63" 64" 65" 66" 67" 68" 69" 70" 71" 72" 73" 74" 75" 76" 77" 78" 79" 80" 81" 82" 83" 84" 85" 86" 87" 88" 89" 90" 91" 92" 93" 94" 95" 96" 97" 98" 99" 100" 101" 102" 103" 104" 105" 106" 107" 108" 109" 110" 111" 112" 113" 114" 115" 116" 117" 118" 119" 120" 121" 122" 123" 124" 125" 126" 127" 128" 129" 130" 131" 132" 133" 134" 135" 136" 137" 138" 139" 140" 141" 142" 143" 144" 145" 146" 147" 148" 149" 150" 151" 152" 153" 154" 155" 156" 157" 158" 159" 160" 161" 162" 163" 164" 165" 166" 167" 168" 169" 170" 171" 172" 173" 174" 175" 176" 177" 178" 179" 180" 181" 182" 183" 184" 185" 186" 187" 188" 189" 190" 191" 192" 193" 194" 195" 196" 197" 198" 199" 200" 201" 202" 203" 204" 205" 206" 207" 208" 209" 210" 211" 212" 213" 214" 215" 216" 217" 218" 219" 220" 221" 222" 223" 224" 225" 226" 227" 228" 229" 230" 231" 232" 233" 234" 235" 236" 237" 238" 239" 240" 241" 242" 243" 244" 245" 246" 247" 248" 249" 250" 251" 252" 253" 254" 255" 256" 257" 258" 259" 260" 261" 262" 263" 264" 265" 266" 267" 268" 269" 270" 271" 272" 273" 274" 275" 276" 277" 278" 279" 280" 281" 282" 283" 284" 285" 286" 287" 288" 289" 290" 291" 292" 293" 294" 295" 296" 297" 298" 299" 300" 301" 302" 303" 304" 305" 306" 307" 308" 309" 310" 311" 312" 313" 314" 315" 316" 317" 318" 319" 320" 321" 322" 323" 324" 325" 326" 327" 328" 329" 330" 331" 332" 333" 334" 335" 336" 337" 338" 339" 340" 341" 342" 343" 344" 345" 346" 347" 348" 349" 350" 351" 352" 353" 354" 355" 356" 357" 358" 359" 360" 361" 362" 363" 364" 365" 366" 367" 368" 369" 370" 371" 372" 373" 374" 375" 376" 377" 378" 379" 380" 381" 382" 383" 384" 385" 386" 387" 388" 389" 390" 391" 392" 393" 394" 395" 396" 397" 398" 399" 400" 401" 402" 403" 404" 405" 406" 407" 408" 409" 410" 411" 412" 413" 414" 415" 416" 417" 418" 419" 420" 421" 422" 423" 424" 425" 426" 427" 428" 429" 430" 431" 432" 433" 434" 435" 436" 437" 438" 439" 440" 441" 442" 443" 444" 445" 446" 447" 448" 449" 450" 451" 452" 453" 454" 455" 456" 457" 458" 459" 460" 461" 462" 463" 464" 465" 466" 467" 468" 469" 470" 471" 472" 473" 474" 475" 476" 477" 478" 479" 480" 481" 482" 483" 484" 485" 486" 487" 488" 489" 490" 491" 492" 493" 494" 495" 496" 497" 498" 499" 500" 501" 502" 503" 504" 505" 506" 507" 508" 509" 510" 511" 512" 513" 514" 515" 516" 517" 518" 519" 520" 521" 522" 523" 524" 525" 526" 527" 528" 529" 530" 531" 532" 533" 534" 535" 536" 537" 538" 539" 540" 541" 542" 543" 544" 545" 546" 547" 548" 549" 550" 551" 552" 553" 554" 555" 556" 557" 558" 559" 560" 561" 562" 563" 564" 565" 566" 567" 568" 569" 570" 571" 572" 573" 574" 575" 576" 577" 578" 579" 580" 581" 582" 583" 584" 585" 586" 587" 588" 589" 590" 591" 592" 593" 594" 595" 596" 597" 598" 599" 600" 601" 602" 603" 604" 605" 606" 607" 608" 609" 610" 611" 612" 613" 614" 615" 616" 617" 618" 619" 620" 621" 622" 623" 624" 625" 626" 627" 628" 629" 630" 631" 632" 633" 634" 635" 636" 637" 638" 639" 640" 641" 642" 643" 644" 645" 646" 647" 648" 649" 650" 651" 652" 653" 654" 655" 656" 657" 658" 659" 660" 661" 662" 663" 664" 665" 666" 667" 668" 669" 670" 671" 672" 673" 674" 675" 676" 677" 678" 679" 680" 681" 682" 683" 684" 685" 686" 687" 688" 689" 690" 691" 692" 693" 694" 695" 696" 697" 698" 699" 700" 701" 702" 703" 704" 705" 706" 707" 708" 709" 710" 711" 712" 713" 714" 715" 716" 717" 718" 719" 720" 721" 722" 723" 724" 725" 726" 727" 728" 729" 730" 731" 732" 733" 734" 735" 736" 737" 738" 739" 740" 741" 742" 743" 744" 745" 746" 747" 748" 749" 750" 751" 752" 753" 754" 755" 756" 757" 758" 759" 760" 761" 762" 763" 764" 765" 766" 767" 768" 769" 770" 771" 772" 773" 774" 775" 776" 777" 778" 779" 780" 781" 782" 783" 784" 785" 786" 787" 788" 789" 790" 791" 792" 793" 794" 795" 796" 797" 798" 799" 800" 801" 802" 803" 804" 805" 806" 807" 808" 809" 810" 811" 812" 813" 814" 815" 816" 817" 818" 819" 820" 821" 822" 823" 824" 825" 826" 827" 828" 829" 830" 831" 832" 833" 834" 835" 836" 837" 838" 839" 840" 841" 842" 843" 844" 845" 846" 847" 848" 849" 850" 851" 852" 853" 854" 855" 856" 857" 858" 859" 860" 861" 862" 863" 864" 865" 866" 867" 868" 869" 870" 871" 872" 873" 874" 875" 876" 877" 878" 879" 880" 881" 882" 883" 884" 885" 886" 887" 888" 889" 890" 891" 892" 893" 894" 895" 896" 897" 898" 899" 900" 901" 902" 903" 904" 905" 906" 907" 908" 909" 910" 911" 912" 913" 914" 915" 916" 917" 918" 919" 920" 921" 922" 923" 924" 925" 926" 927" 928" 929" 930" 931" 932" 933" 934" 935" 936" 937" 938" 939" 940" 941" 942" 943" 944" 945" 946" 947" 948" 949" 950" 951" 952" 953" 954" 955" 956" 957" 958" 959" 960" 961" 962" 963" 964" 965" 966" 967" 968" 969" 970" 971" 972" 973" 974" 975" 976" 977" 978" 979" 980" 981" 982" 983" 984" 985" 986" 987" 988" 989" 990" 991" 992" 993" 994" 995" 996" 997" 998" 999" 1000"

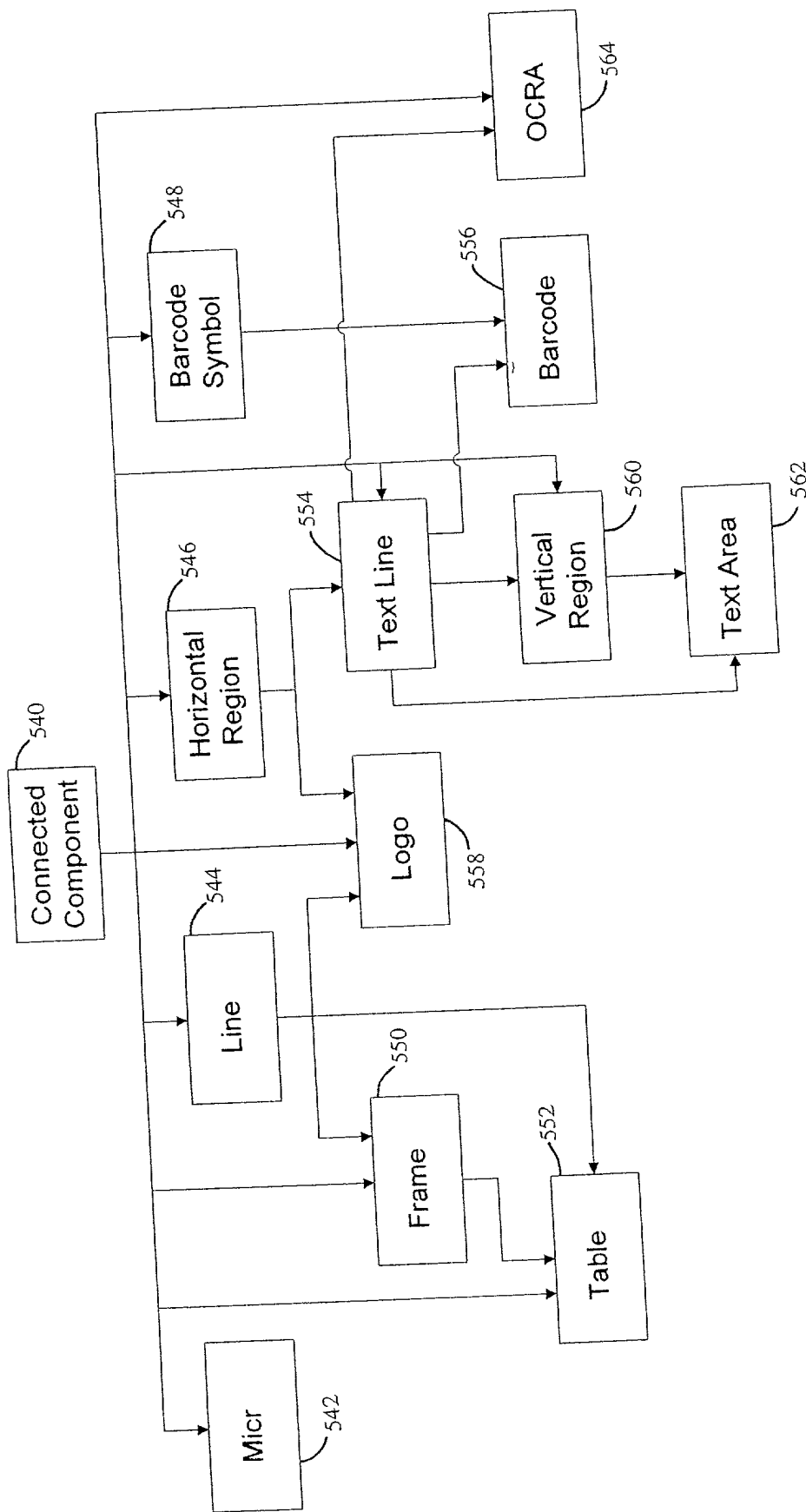



Fig. 5B

Fig. 6A

1. The present invention relates to a system for providing a secure and reliable method of identifying and tracking the movement of goods and materials within a supply chain.

602



604

ACERQUESE DE NOMBRE ESTE DOCUMENTO CON SU SECCION
AUTORIDAD DE ACREDITACION Y ALCANTARILLADOS DE RUBRO 800
EN LOS 15 DIAS SIGUIENTES DESDE LA FECHA DE EMISION

CÓDIGO DE IDENTIFICACION	NOMBRE DE LA EMPRESA	FECHA DE EMISION	FECHA DE VENCIMIENTO
00000000000000000000	ALUMBRADO DE TUBERIA	10/02/2015-001-E	03/02/2016

606

608

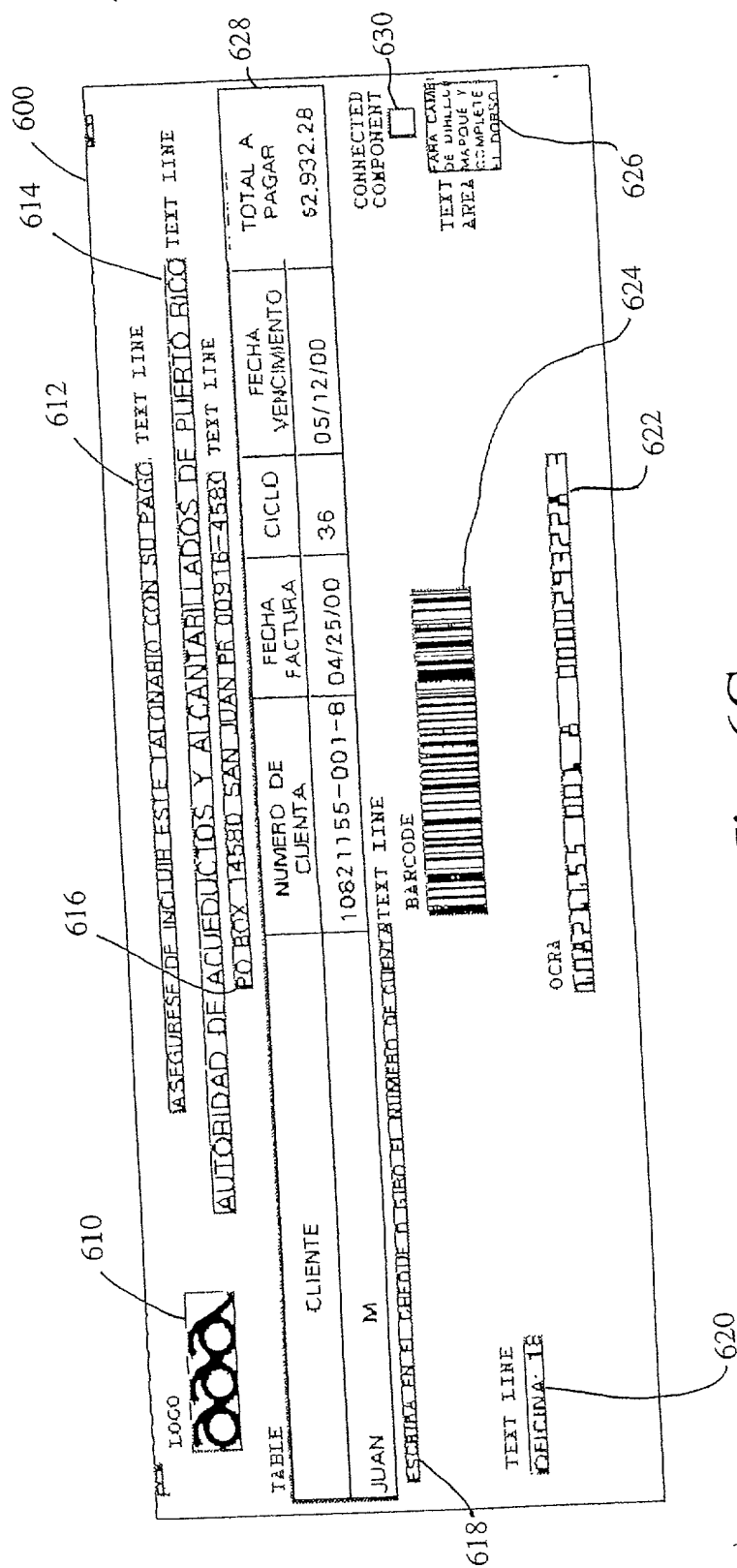
600

RESERVA EN SU DERECHO O USO SU DERECHO DE RESERVA

OTROQUE SE

PARA VERIFICAR
 EL ESTADO DE
 LA AUTENTICIDAD
 DE ESTE DOCUMENTO

Fig. 6B

[illegible]

Type	Upper	Left	Lower	Right	Height	Width	Area	Density	Aspect Ratio
CC	2	27	8	59	7	33	64	0.277	4.714
CC	2	1442	8	1473	7	32	53	0.237	4.571
CC	12	25	12	25	1	1	1	1	1
CC	11	1476	11	1476	1	1	1	1	1
CC	37	827	52	841	16	15	101	0.421	0.938
CC	37	898	52	912	16	15	107	0.446	0.938
CC	37	928	52	940	16	13	88	0.423	0.813
CC	37	944	52	958	16	15	98	0.408	0.938
CC	38	470	53	484	16	15	115	0.479	0.938
CC	38	636	53	649	16	14	94	0.42	0.875
CC	38	665	52	677	15	13	85	0.436	0.867
CC	38	681	51	683	14	3	41	0.976	0.214
CC	38	686	51	698	14	13	98	0.538	0.929
CC	38	714	52	724	15	11	82	0.497	0.733

Fig. 7A

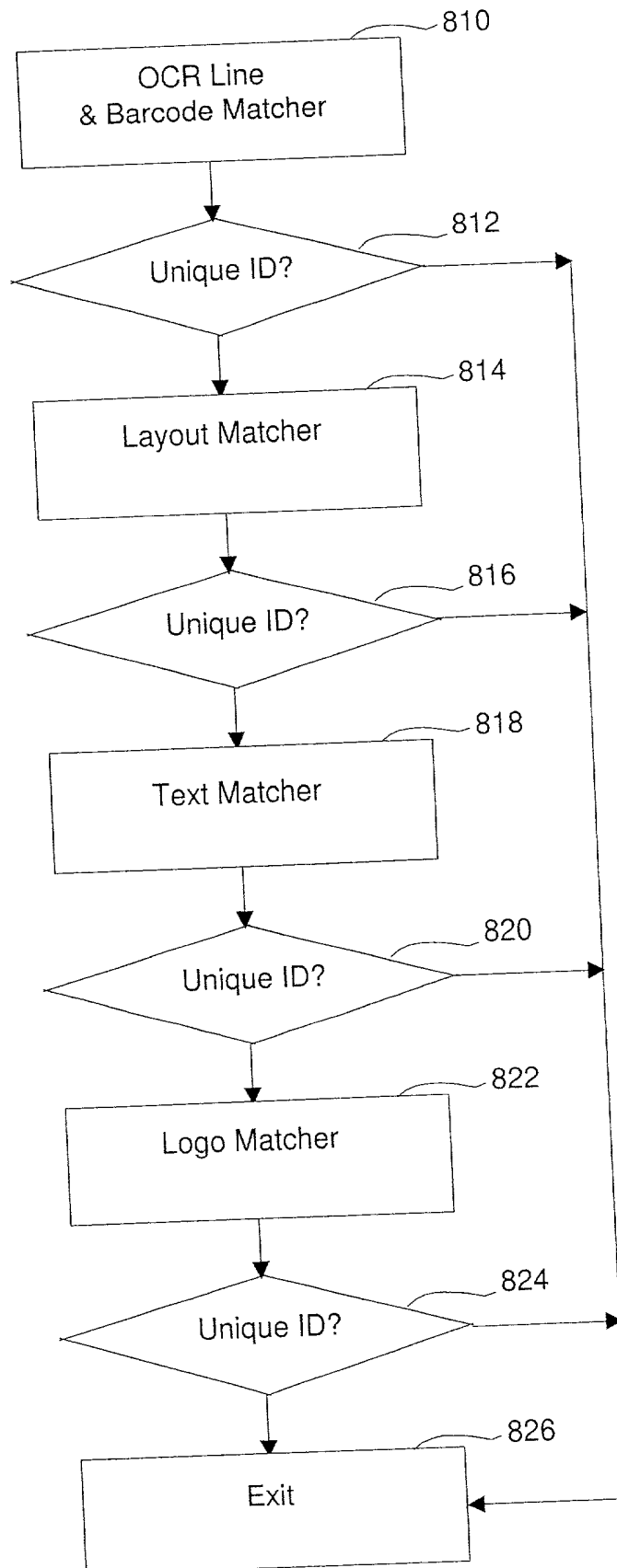


Fig. 8

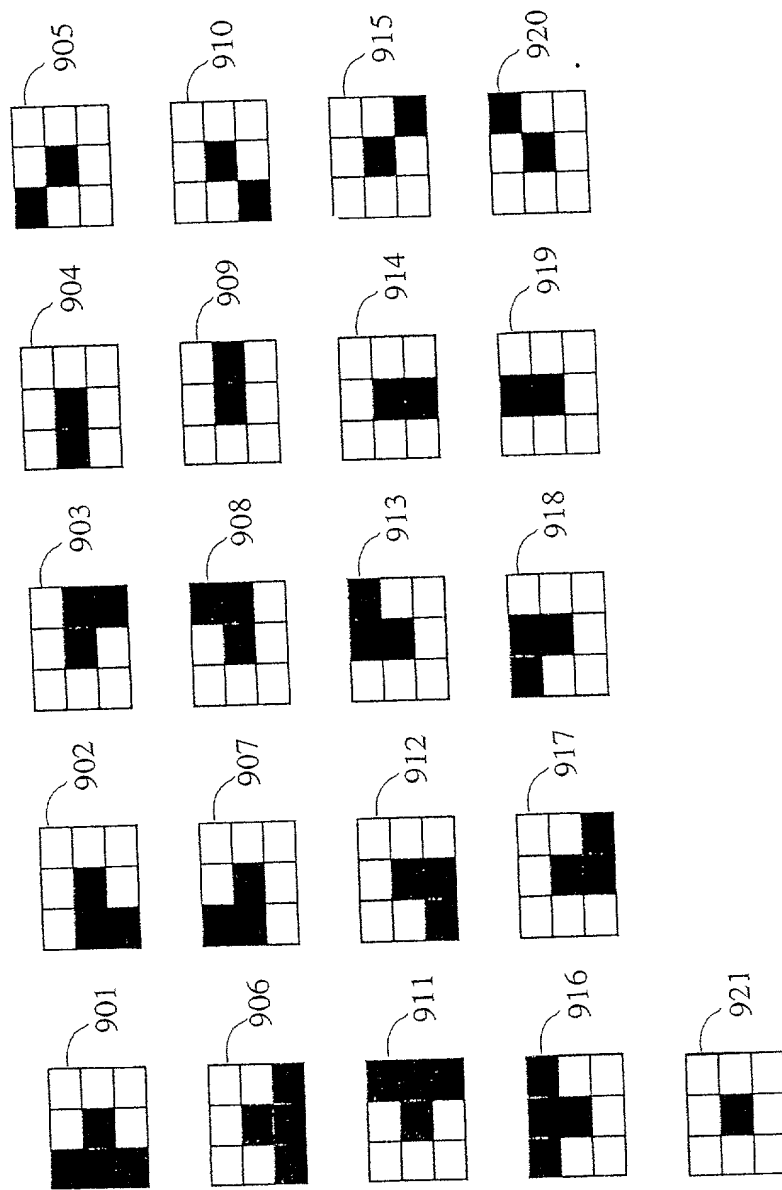


Fig. 9

FIG. 10 is a block diagram of a system 1000. The system 1000 includes a computer 1000, a touch screen display 1004, a card reader 1006, a scanner 1008, a cash dispenser 1010, a cash acceptor 1012, and a network interface 1014. The computer 1000 is connected to the touch screen display 1004, the card reader 1006, the scanner 1008, the cash dispenser 1010, the cash acceptor 1012, and the network interface 1014. The computer 1000 also includes memory 1002.

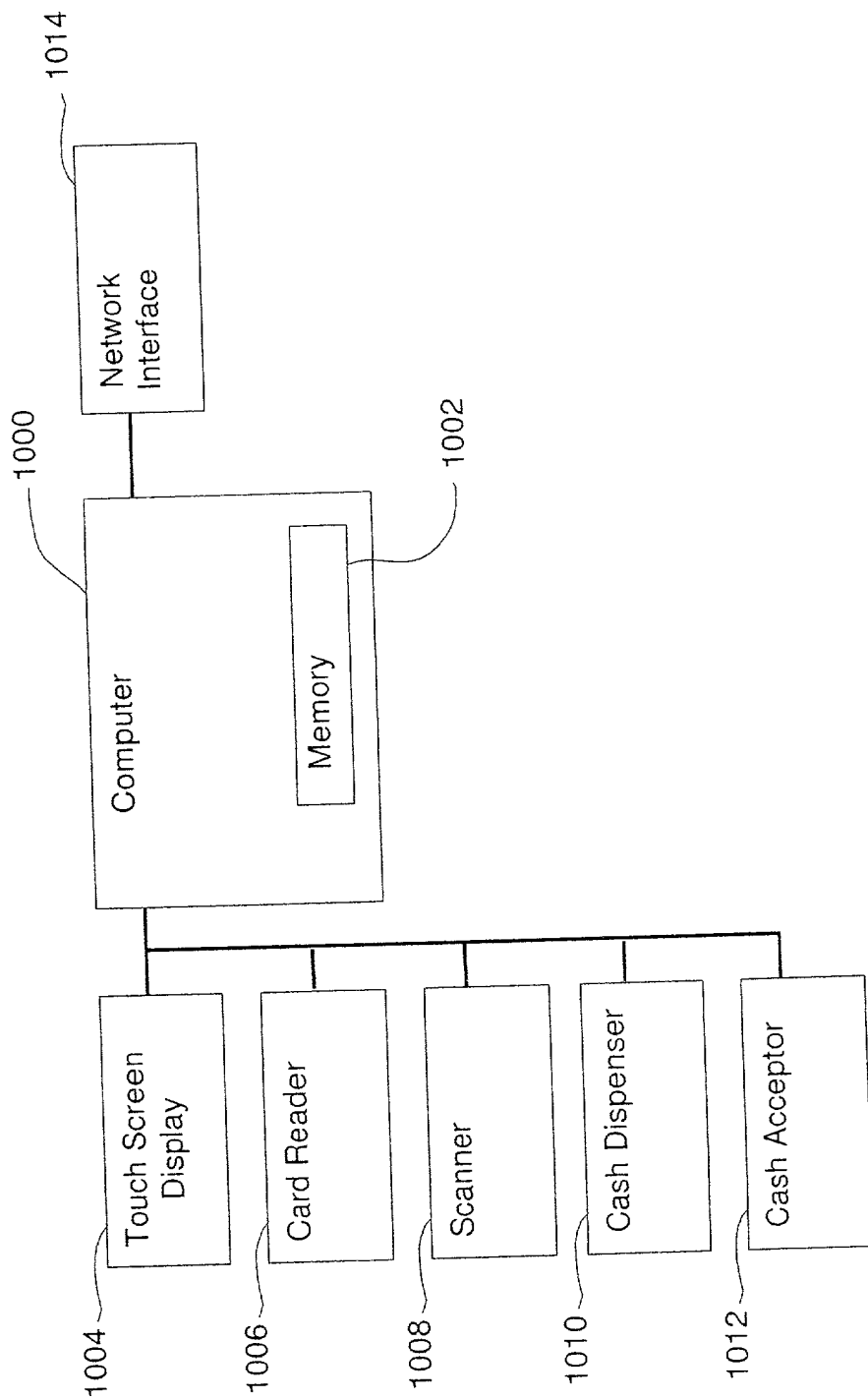


Fig. 10